

CLAIM AMENDMENTS

Please cancel claims 1-25 without prejudice and add the following new claims 26-43.

~~1. A structural section comprising:~~

- ~~a) a horizontal segment; and~~
- ~~b) a first leg spaced apart from a second leg, said first leg and said second leg each comprising:~~
 - ~~i) a first end portion attached to said horizontal segment,~~
 - ~~ii) a second end portion opposite said first end portion and including a flange extending in an inward direction from said second end portion toward a centerline of the structural section, and~~
 - ~~iii) a longitudinal surface extending along said leg between said first end portion and said second end portion, said longitudinal surface positioned inboard of said flange so that a distance between the flanges of said first leg and said second leg is greater than a distance between the longitudinal surfaces extending along said first leg and said second leg.~~

~~2. The structural section recited in claim 1 wherein each said flange extending inward from said second end portion includes:~~

- ~~a) a planar segment extending inward from said second end portion; and~~
- ~~b) a terminal end spaced outboard from said longitudinal surface to provide a gap between said terminal end and said longitudinal surface.~~

~~3. The structural section recited in claim 2 wherein said terminal end is a perpendicular leg extending in a downward direction from said planar segment.~~

~~4. The structural section recited in claim 2 wherein said terminal end is an inclined leg extending in a downward direction from said planar segment, said inclined leg sloped toward said longitudinal surface.~~

~~5. The structural section recited in claim 2 wherein said terminal end is an inclined leg extending in a downward direction from said planar segment, said inclined leg sloped away from said longitudinal surface.~~

~~6. The structural section recited in claim 2 wherein said terminal end in a curvilinear shape extending in a downward direction from said planar segment.~~

~~7. The structural section recited in claim 1 wherein:~~

- ~~a) said distance between the longitudinal surface of said first leg and the longitudinal surface of said second leg is predetermined to cause said longitudinal surfaces to engage a strut inserted between said first leg and said second leg, and~~
- ~~b) said flange extending inward from said second end portion is positioned to provide a gap between a struts engaged by said longitudinal surfaces, and said flange extending inward.~~

~~8. The structural section recited in claim 7 wherein each said longitudinal surface is spaced apart to be fastened to a strut inserted between said first leg and said second leg, each said longitudinal surface being positioned to locate fasteners inboard of said first leg and inboard of said second leg.~~

~~9. A roof truss including the structural section of claim 1.~~

~~10. A floor truss including the structural section of claim 1.~~

~~11. The structural section recited in claim 1 wherein said structural section is a roof truss chord.~~

~~12. The structural section recited in claim 1 wherein said structural section is a floor truss chord.~~

~~13. The structural section recited in claim 1 wherein said structural section is a track member in a wall assembly.~~

~~14. The structural section recited in claim 1 wherein said structural section is a chord member in a header assembly.~~

~~15. The structural section recited in claim 1 wherein said structural section is a stud member in a wall assembly.~~

~~16. A roof truss having a structural section comprising:~~

- ~~a) a horizontal segment; and~~
- ~~b) a first leg spaced apart from a second leg, said first leg and said second leg each comprising;~~

- i) a first end portion attached to said horizontal segment;
- ii) a second end portion opposite said first end portion and including a flange extending in an inward direction from said second end portion, toward a centerline of the structural section; and
- iii) a longitudinal surface extending along said leg between said first end portion and said second end portion, said longitudinal surface positioned inboard of said flange so that a distance between the flanges of said first leg and said second leg is greater than a distance between the longitudinal surfaces extending along said first leg and said second leg.

17. The roof truss recited in claim 16 wherein said structural section is a chord member and said roof truss includes:

- a) a top chord member;
- b) a bottom chord member; and
- c) a plurality of truss web members extending between said top chord and said bottom chord, each truss web member having an outside dimension equal to said distance between the longitudinal surfaces that extend along said first leg and said second leg.

18. The roof truss recited in claim 17 including:

- a) a first gap extending between the flange of said first leg and each truss web member extending between said top chord and said bottom chord; and
- b) a second gap extending between the flange of said second leg and each truss web member extending between said top chord and said bottom chord.

19. The roof truss recited in claim 17 wherein each said longitudinal surface is fastened to the truss chord inserted between said first leg and said second leg, each said longitudinal surface being positioned to locate fasteners inboard of said first leg and inboard of said second leg.

20. The roof truss recited in claim 16 wherein said flange extending inward from said second end portion includes:

- a) a planar segment extending inward from said second end portion; and
- b) a terminal end spaced outboard from said longitudinal surface to provide a gap between said terminal end and said longitudinal surface.

- ~~21. The roof truss recited in claim 20 wherein said terminal end is a perpendicular leg extending in a downward direction from said planar segment.~~
- ~~22. The roof truss recited in claim 20 wherein said terminal end is an inclined leg extending in a downward direction from said planar segment, said inclined leg sloped toward said longitudinal surface.~~
- ~~23. The roof truss recited in claim 20 wherein said terminal end is an inclined leg extending in a downward direction from said planar segment, said inclined leg sloped away from said longitudinal surface.~~
- ~~24. The roof truss recited in claim 20 wherein said terminal end is a curvilinear shape extending in a downward direction from said planar segment.~~
- ~~25. A structural section comprising: a U-shaped cross section having two spaced apart legs, each leg including;~~
- ~~a) a flange extending inwardly from an upper end toward a centerline of said U-shaped cross section;~~
 - ~~b) a longitudinal surface extending along a respective leg, and~~
 - ~~c) a distance formed between said longitudinal surfaces of the two legs, said distance being greater than a distance between said inward flanges of the two legs such that an engaging force between a member and the longitudinal surfaces is increased when another member is inserted between the longitudinal surfaces of said two leg members.~~
- ~~26. A structural section comprising:~~
- ~~a) a first leg and a second leg spaced apart from said first leg and connected thereto by a horizontal segment, said first leg and said second leg each comprising;~~
 - ~~i) a first end portion attached to said horizontal segment;~~
 - ~~ii) a second end portion opposite said first end portion, said second end portion including an inboard extending flange in combination with a stiffener member attached along one edge thereof, said stiffener member extending downward at an oblique angle from said inboard extending flange, said stiffener member inboard from said second end portion; and~~
 - ~~iii) a longitudinal clamping surface extending along said first leg and a longitudinal clamping surface extending along said second leg between~~

said first end portion and said second end portion, each said longitudinal clamping surface positioned inboard of said stiffener member so that a distance (D2) between said longitudinal clamping surfaces is less than a distance (D3) between said stiffener members.

27. The invention recited in claim 26 wherein each said stiffener member is slanted toward said longitudinal clamping surface.

28. The invention recited in claim 26 wherein each said stiffener member is slanted away from said longitudinal clamping surface.

29. The invention recited in claim 26 wherein said stiffener member is a curvilinear stiffener member extending downward from said flange edge, said curvilinear stiffener member including a planar leg parallel to and spaced apart from said flange to provide a gap therebetween.

30. The invention recited in claim 26 wherein:

- a) said distance (D2) between the longitudinal clamping surface of said first leg and the longitudinal clamping surface of said second leg is predetermined so that said longitudinal surfaces engage a strut inserted therebetween, and
- b) said stiffener member is positioned to provide a gap between said strut and said stiffener member.

31. The invention recited in claim 30 wherein each said longitudinal clamping surface is fastened to said strut inserted between said first leg and said second leg, each said longitudinal clamping surface being positioned to locate fasteners inboard of said first leg and inboard of said second leg.

32. The invention recited in claim 26 wherein said first leg and said second leg are longer than said horizontal segment.

33. A roof truss constructed with the structural section of claim 26, wherein said roof truss comprises:

- a) a top chord member comprising said structural section;
- b) a bottom chord member comprising said structural section; and
- c) a plurality of truss web members extending between said top chord member and said bottom chord member, each said truss web member having an outside dimension equal to said distance (D2).

34. The roof truss recited in claim 33 including:

- a) a first gap extending between said oblique stiffener member of said first leg and each truss web member extending between said top chord and said bottom chord; and
- b) a second gap extending between said oblique stiffener member of said second leg and each truss web member extending between said top chord and said bottom chord.

35. The roof truss recited in claim 34 wherein each said longitudinal clamping surface is fastened to each truss web inserted therebetween.

36. A roof truss constructed with the structural section of claim 29, wherein said roof truss comprises:

- a) a top chord member comprising said structural section;
- b) a bottom chord member comprising said structural section; and
- c) a plurality of truss web members extending between said top chord member and said bottom chord member, each said truss web member having an outside dimension equal to said distance (D2).

37. The roof truss recited in claim 36 including:

- a) a first gap extending between said curvilinear stiffener member of said first leg and each truss web member extending between said top chord and said bottom chord; and
- b) a second gap extending between said curvilinear stiffener member of said second leg and each truss web member extending between said top chord and said bottom chord.

38. The roof truss recited in claim 37 wherein each said longitudinal clamping surface is fastened to each truss web inserted therebetween.

39. A floor truss including at least one structural section according to claim 26 as a chord member of the floor truss.

40. A floor truss including at least one structural section according to claim 29 as a chord member of the floor truss.

41. A wall assembly including the structural section according to claim 26 as a track member or a stud member.

42. A wall assembly including the structural section according to claim 29 as a track member or a stud member.
43. A header assembly including at least one structural section according to claim 26 as a chord member.
44. A header assembly including at least one structural section according to claim 29 as a chord member.
45. The header assembly according to claim 43 wherein said structural section provides a top chord and bottom chord in a header over a window opening.
46. The header assembly according to claim 44 wherein said structural section provides a top chord and bottom chord in a header over a window opening.
47. In a roof truss including a top roof truss chord, a bottom roof truss chord, and a plurality of web members extending between, an improved top roof truss chord and an improved bottom roof truss chord comprising:
- a) a first vertical leg spaced apart from a second vertical leg and connected thereto by a horizontal member, each vertical leg including:
 - i) a first end portion attached to said horizontal member and a second end portion opposite said first end portion;
 - ii) a clamping surface parallel to and positioned inboard of said vertical leg whereby said clamping surface of said first vertical leg is spaced apart from said clamping surface of said second vertical leg a distance (D2) so that the spaced apart clamping surfaces engage said plurality of web members extending between said top roof truss chord and said bottom roof truss chord;
 - iii) a flange attached to and extending inboard from said second end portion of said vertical leg, said flange including a stiffener extending at an oblique angle from said flange whereby said stiffener of said first vertical leg is spaced apart from said stiffener of said second vertical leg a distance (D3) greater than distance (D2) so that each said stiffener is positioned proximate said plurality of web members to provide a gap between said stiffener and each web member.
48. The invention recited in claim 47 wherein said distance (D3) is greater than the length of said vertical leg.

49. The invention recited in claim 47 wherein each said oblique angled stiffener is slanted toward said clamping surface.
50. The invention recited in claim 47 wherein each said oblique angled stiffener is slanted away from said clamping surface.
51. The invention recited in claim 47 wherein said stiffener is curvilinear member, each curvilinear stiffener including a planar leg parallel to and spaced apart from said flange to provide a gap between said planar leg and said flange.
52. The invention recited in claim 47 wherein each web member is fastened to said spaced apart clamping surfaces.
53. In a structural section comprising a first leg, and a second leg spaced apart from said first leg and attached thereto by a horizontal segment, said first leg and said second leg each including a first end portion attached to said horizontal segment, a second end portion opposite said first end portion, and a longitudinal clamping surface located between said first end portion and said second end portion, said longitudinal clamping surface positioned inboard of said second end portion, the improvement comprising:
- flanges extending inward from said second end portions in combination with stiffeners attached along an edge of said flanges, said stiffeners extending downward at an oblique angle from said flanges, said stiffeners spaced apart a distance (D3) greater than a distance (D2) between said clamping surfaces.
54. The invention recited in claim 53 wherein each said oblique angled stiffener is slanted toward said clamping surface.
55. The invention recited in claim 53 wherein each said oblique angled stiffener is slanted away from said clamping surface.
56. The invention recited in claim 53 wherein said stiffener is curvilinear member, each curvilinear stiffener including a planar leg parallel to and spaced apart from said flange to provide a gap between said planar leg and said flange.
57. The invention recited in claim 53 wherein each web member is fastened to said spaced apart clamping surfaces.